

ONTARIO PHASE-OUT OF OZONE-DEPLETING SUBSTANCES

A Compliance Guide

A guide to assist manufacturers, retailers, importers and users of CFCs and CFC-manufactured products to comply with Ontario's statutes and regulations governing the phase-out of ozone-depleting substances.



**Environment
Environnement**





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1.0**INTRODUCTION****1.1****Background**

Chlorofluorocarbons (CFCs) are a family of long-lasting synthetic chemicals that contain carbon, chlorine, fluorine and sometimes hydrogen. They were developed about 60 years ago as a substitute for ammonia in refrigerators. CFCs continue to be used as coolants in refrigerators and air conditioners as well as blowing agents in foam product manufacturing, as cleaning solvents for electronic components, as slurries in aerosol sprays, and in hospital sterilization procedures. Related to CFCs, halons are a group of chemicals that contain bromine. They are used almost exclusively in fire-protection applications.

Once released from the products and processes where they are used, CFCs and halons rise into the upper atmosphere and damage the ozone layer which filters out much of the sun's ultraviolet light before it reaches the Earth's surface. Without the protection of the ozone layer, the sun's ultraviolet rays would cause significant harm to animal and plant life, and result in an increase in the incidence of skin cancer and cataracts in humans. Over the past 20 years, the ozone layer has shrunk by an estimated one to three per cent, mainly because of the effect of CFCs and other man-made ozone-depleting substances.

International concern about the depletion of the ozone layer led to an agreement signed by 60 countries, including Canada, known as the "Montreal Protocol for Substances that Deplete the Ozone Layer" which came into force on July 1, 1989 (subsequently amended in June 1990 resulting in an international commitment to ban the manufacturing of CFCs by the year 2000). Ontario was the first province in Canada to pass legislation which supports the intent of the Montreal Protocol.

1.2**Ontario's Goals in the Phase-out of Ozone-depleting Substances**

By 1993, the consumption of CFCs in Ontario is to be reduced by more than half of the 1986 consumption level (approx. 10,000 tonnes/yr.). Any further manufacturing or use of CFCs and CFC-manufactured products in the province will be banned as chemical substitutes and new manufacturing processes become commercially available and when an infrastructure for the collection and recycling of certain CFCs are developed.

TABLE 1: DESIGNATED OZONE-DEPLETING SUBSTANCES

The following substances have been designated under section 47j of Part V-A of the *Environmental Protection Act* as "ozone-depleting substances" and are subject to regulation. The "Ozone Depletion Potential" (ODP) index indicates the relative harm that the substances can do to the ozone layer. An ODP value of 1.0 is assigned to CFC-11. All other ODP values are assigned relative to CFC-11.

Type	Application	ODP
CFC-11 (fluorotrichloromethane)	Propellant, refrigerant, cleaning solvent, blowing agent	1.0
CFC-12 (dichlorodifluoromethane)	Propellant, refrigerant, blowing agent	1.0
CFC-113 (1,1,2-trichloro-1,2,2-trifluoroethane)	Refrigerant, cleaning agent, blowing agent	0.8
CFC-114 (1,2-dichloro-1,1,2,2-tetrafluoroethane)	Propellant, refrigerant, blowing agent	1.0
CFC-115 (1-chloro-1,1,2,2,2-pentafluoroethane)	Refrigerant, blowing agent	0.6
Halon 1211 (bromochlorodifluoromethane)	Fire protection equipment (portable)	3.0
Halon 1301 (bromotrifluoromethane)	Fire protection equipment (banked, total flood system)	10.0
Halon 2402 (dibromotetrafluoroethane)	Fire protection equipment (Not used in Ontario)	6.0

2.0

CONTROL OF OZONE-DEPLETING SUBSTANCES

In Ontario, control of the application and use of designated CFCs and other ozone-depleting substances is governed by Part V-A of the *Environmental Protection Act* (amended June 20, 1989) and regulations under the Act.

2.1

Environmental Protection Act, Part V-A

- Provides a list of "designated" ozone-depleting substances subject to regulation, including certain types of CFCs and halons (see Table 1).
- Prohibits the manufacture and import of CFC-propelled aerosols and CFC-blown foam packaging, effective July 1, 1989.
- Authorizes the Lieutenant Governor in Council (Cabinet) to make regulations respecting the use, transfer, display, transportation, storage, recycling and disposal of things containing or made using an ozone-depleting substance. In addition, Cabinet may make regulations providing for exemptions from the requirements of the statute and regulations.

Note: To date, the regulations under Part V-A of the *Environmental Protection Act* only impact aerosols, foams and spent refrigerants. No regulations are in place which impact CFC solvents or halons. Also, the regulations have not yet included such chemicals as HCFC-22, methyl chloroform and carbon tetrachloride.

2.2

Ontario Regulation 394/89 - July 1, 1989

- Exempts a list of products containing CFCs that act as a propellant (see Section 3.4).
- Provided a "sell-through" period;
CFC-propelled products (December 31, 1989)
CFC-blown foam packaging (September 30, 1989)

2.3

Ontario Regulations 518/90 and 519/90 - Sept. 15, 1990 (Amendments to Regulation 394/89)

- Provides extensive requirements for the manufacturers and importers of various types of flexible and rigid insulation foams. Initiates a CFC reduction program for all foams manufactured in Ontario and similar requirements for foams imported into Ontario.
- Expands the ban on aerosol propellants to include slurring agents and pressurized containers of 10 kg. or less of ozone-depleting substances.
- The regulation applies to Ontario-based manufacturers, importers and retailers of CFC-manufactured foams. It also applies to out-of-province manufacturers and distributors which export CFC-manufactured products into Ontario. Exemptions, sell-through periods and reporting requirements are also detailed.

**Ontario Regulation 520/90 - Sept. 15, 1990
(Amendment to Regulation 309)**

- Under Regulation 309, all industrial generators of waste in Ontario must characterize their wastes and register those that are liquid industrial or hazardous. The proper management of hazardous wastes, from generation to treatment and disposal, is tracked by a manifest system. Generators, carriers and receivers of hazardous wastes must accurately complete the manifests and ensure that copies are sent to the Ministry of the Environment. Wastes are identified as being hazardous either by a characteristic of the waste or by being listed in one of four schedules appended to the regulation.
 - Spent refrigerants containing CFC-11 and CFC-12 in gaseous form are designated as hazardous waste chemicals under Schedule 2(b). In addition, spent refrigerants containing CFC-11 and CFC-113 in liquid form are designated as hazardous industrial wastes under Schedule 1.
 - Effective September 15, 1990, Regulation 309 was amended to simplify the management of spent refrigerants destined for recycling by modifying some of the requirements for generator registration, manifests and site and transportation approvals.
- * It should be noted that changes to Regulation 309 do not preclude the requirements under the Transportation of Dangerous Goods Act (TDGA). Administered by Transport Canada.**

3.0 AEROSOLS

3.1 Affected Products

Propellants

Such as blowhorns, component coolers, cosmetics, hair sprays, cooking sprays, dust-off sprays (any product which uses a designated CFC as a propellant).

CFC Slurrying Agents

Used in the preparation of all aerosol products.

Pressurized Containers of 10 kg. or less of Ozone-depleting Substances

Such as home repair kits for refrigeration and mobile air conditioning systems, etc.

3.2 Banned Uses and Applications

- July 1, 1989
- Aerosol products manufactured in or imported into Ontario which use CFCs as propellants. Six-month sell-through period ended December 31, 1989.
- Sept. 15, 1990
- Products manufactured in or imported into Ontario which use CFCs as slurrying agents. Approx. four-month sell-through period ending December 31, 1990.
- Sept. 15, 1990
- Pressurized containers of 10 kg. or less of ozone-depleting substance manufactured in or imported into Ontario. Approx. four-month sell-through period ending December 31, 1990.

3.3 Retail Restrictions

All banned aerosol products must be removed from retail sale by the end of the specified sell-through period. Some exempt products may be sold only for commercial use, and are banned at retail (see Section 3.4).

3.4

Exemptions

Exemptions apply to listed products which are sold at retail or for commercial use. These exemptions will exist until further amendments are made to Regulation 394/89.

- a.* Drugs or medicines which have a "Drug Identification Number" issued under the federal *Food and Drug Act* (excluding prescription drugs).
- b. Prescription drugs such as bronchial dilators, topical anaesthetics, cytospray and veterinary powder wound sprays.
- c. Spermicidal contraceptive foams.
- d. Release agents for moulds used in production of plastics and elastomer materials.
- e. Cleaning solvents for commercial use on electrical or electronic equipment (excluding compressed air, freezing agents, etc.).
- f.* Pressurized containers of insulation foam products.
- g. Protective sprays for application on high quality photographs used in research.
- h. Lubricants used on equipment in underground mining operations.
- i. Products used during in-flight for aircraft maintenance and operation.
- j. Hand-held halon fire extinguishers (cannisters of 10 kg. or less).

*

Exemptions end December 31, 1990 for items (a) and (f).

On December 31, 1990 these products are banned from sale and transfer and will be removed from the schedule of exemptions under the *Environmental Protection Act*. It is advised that manufacturers and importers limit their production/import to accommodate the December 31, 1990 ban on sale and transfer.

Prescription drugs remain exempt under Part V-A of the *Environmental Protection Act*.

4.0

FOAMS

4.1

Affected Products

Foam Packaging

Such as food and other packaging materials. Beverage labels and any containers blown with CFCs.

Flexible Foams

Such as furniture foams, dashboards, seats and head rests in automobiles, mattresses, and carpet underlay blown with CFCs.

Rigid Foam Boardstock

Polyurethane: commonly used in construction applications, including wall and roofing insulation.

Polyisocyanurate: commonly used in transport applications and wall insulation.

Extruded polystyrene: commonly used in construction applications, including wall and roofing sheaths.

Phenolic foams: commonly used in construction applications, including mostly roofing insulation.

Poured or Sprayed in-place Foams

CFC-blended formulations commonly used for construction applications (window seals, ceilings), road applications (underground pipes), and appliance and transport applications (refrigerated vehicles and refrigerators/freezers).

Non-designated plastic foams (not covered above) which use CFCs in their manufacture are now banned from being manufactured in Ontario.

4.2

Banned Uses and Applications

July 1, 1989

- Foam packaging materials including all food and beverage packaging materials manufactured in or imported into Ontario which use CFCs as a blowing agent. This includes the import of products packaged in CFC-blown foams. Three-month sell-through period ended September 30, 1989.

Sept. 15, 1990

- Any new manufacturing operations or manufacturing expansions in Ontario for the production of CFC-blown foams of any type.
- Non-designated plastic foams which use CFCs as a blowing agent are banned from manufacture in Ontario and import into Ontario.
- Non-designated flexible plastic foams available in Ontario on or before September 15, 1990, may be sold until the stock has been depleted. Non-designated rigid plastic foams available in Ontario on or before December 31, 1990, may be sold for 6 months until June 30, 1991.
- The import of CFC-blown foams from outside Ontario which do not comply with the CFC-reduction schedules (see Table 2 and "Requirements for Foam Manufacturers Located Outside Ontario").

Dec. 31, 1993

- Manufacturing in and import into Ontario any flexible foam or rigid insulation foam blown with CFCs, including previously exempted applications. (December 31, 1993 is the final phase-out date for these products under the reduction schedules.)

The Ontario Ministry of the Environment will track the availability of CFC substitutes and the ongoing toxicity studies. If the substitutes do not become commercially available, the appropriateness of the dates will be evaluated.

4.3

Restricted Uses and Applications

Sept. 15, 1990

- Manufacturing in and import into Ontario of CFC-blown flexible polyurethane foams are restricted to foams which meet annual consumption levels as permitted under the reduction schedules (see Table 2). Strict reporting requirements are in place for Ontario-based manufacturers and importers as well as out-of-province manufacturers and distributors which export flexible foams into Ontario.

Jan. 1, 1991

- Manufacturing in and import into Ontario of specified types of rigid insulation foam are restricted to foams which meet annual consumption levels as permitted under the reduction schedules (see Table 2). Strict reporting requirements are in place for Ontario-based manufacturers and importers as well as out-of-province manufacturers and distributors which export rigid insulation foam into Ontario.

NOTE: These restrictions do not apply to the import of final, manufactured products (such as furniture) which may contain CFC-blown foams.

4.4

Reduction Schedules for Designated CFC-blown Foams and Foam Products

Application

The reduction schedules apply to Ontario-based manufacturers and importers of the designated foams and foam formulations (designated in Section 25(3) of Regulation 518/90) as well as out-of-province manufacturers and distributors which export the designated foams into Ontario.

TABLE 2: CFC-REDUCTION SCHEDULES FOR MANUFACTURERS OF FOAMS AND FOAM FORMULATIONS

	1990	1991	1992	1993*	1994*
Flexible Polyurethane	25 %	35 %	50 %	75 %	100 %
Rigid Foam Insulation:					
Polyurethane	n/a	25 %	50 %	75 %	100 %
Polyisocyanurate	n/a	00 %	25 %	75 %	100 %
Extruded polystyrene	n/a	50 %	50 %	100 %	100 %
Phenolic	n/a	25 %	50 %	75 %	100 %
Sprayed/Poured-in Place Polyurethane Foams and Foam Formulations:					
Insulation of electrical appliances, hot water heaters, refrigerated vehicles or refrigerated mobile equipment	n/a	00 %	00 %	00 %	100 %
Other applications	n/a	15 %	30 %	50 %	100 %
Other Plastic Foams (Not identified in Section 25(3) of Regulation 518/90)	n/a	100 %	100 %	100 %	100 %

*** The Ontario Ministry of the Environment will track the availability of CFC substitutes and the ongoing toxicity studies. If the substitutes do not become commercially available, the appropriateness of the dates will be evaluated.**

Reduction Target Levels

Reduction target levels are expressed for the calendar year of operation (from January 1 to December 31), with the exception of the flexible foam reductions in 1990 (September 15, 1990 to December 31, 1990). They are expressed as a percentage of a *reference quantity (RQ)*.

For flexible foams, the RQ is the amount of each CFC used in the manufacture of a foam during the first 12-month period of production between January 1, 1986 and September 15, 1990 multiplied by the appropriate "Ozone Depletion Potential" of each CFC (see Table 1).

For rigid foam insulation, the RQ is the amount of each CFC used in the manufacture of a designated foam or foam formulation during the first 12-month period of operation between January 1, 1989 and September 15, 1990 multiplied by the appropriate "Ozone Depletion Potential" of each CFC (see Table 1).

For CFC blended foam formulations used in electrical appliances, hot water heaters, refrigerated vehicles or refrigerated mobile equipment, the RQ is the ratio of ozone depleting material to a unit of foam insulation (e.g. kilograms of CFC-11 to kilograms of foam insulation) used during the first 12-month period between January 1, 1989 and September 15, 1990.

4.5

Exemption

Plastic foams not designated in the reduction schedules (Section 25(3) of Regulation 518/90) may be manufactured using CFCs for research and development purposes.

4.6

Reporting Requirements

Purpose

- To ensure that all manufacturers and importers of foams and foam formulations comply with Ontario's reduction schedules.

Foam manufacturers located outside of Ontario, wishing to export their products into the province, must fulfill the same CFC reduction and reporting requirements as Ontario-based manufacturers to the satisfaction of the Ministry of the Environment.

Penalty for Non-compliance

Ontario companies which do not comply with the reporting requirements will be banned from manufacturing and/or importing foams and foam formulations. The *Environmental Protection Act* provides for penalties of up to \$2 million and/or one year jail term. Actual penalties will vary depending on the circumstances and the number of offences committed.

Out-of-province suppliers who do not comply with the reporting requirements will become ineligible to export foams and foam formulations into Ontario.

Ontario-based importers will be notified against continuing doing business with these firms. The sale of imported foams or foam formulations from non-complying suppliers is illegal.

Manufacturers of Foams and Foam Products Within and Outside of Ontario

- a. Use "Form A" (see Appendix A) to report Reference Quantity (RQ) of CFC consumption. Applications which are exempt from CFC reductions must also establish a RQ with MOE.

This form must be completed in full and received by the Ministry of the Environment by November 30, 1990. Separate forms must be submitted for each plant or manufacturing facility.

No existing Ontario facility manufacturing CFC-blown foams or foam formulations may continue operation after November 30, 1990 unless Form A has been submitted to the Ontario Ministry of the Environment.

Out-of-province manufacturers which have reported reference quantities (RQs) using Form A, will receive a reference number to be used by the importer in compliance with the Ministry's reporting requirements for importers of foams and foam formulations.

- b. Use "Form B" (see Appendix A) to report "Annual Allowable CFC Consumption." This form must be completed and submitted to the Ministry of the Environment by March 31 of each year the regulation is in place. Separate forms must be submitted for each manufacturing facility (including facilities which manufacture foams exempt from CFC reductions).

Annual Allowable CFC Consumption is calculated by multiplying the RQ for a designated foam by the Reduction Factor (shown in Table 3).

Ontario-based Importers of Foams and Foam Formulations

Importers may not bring CFC-blown foams into Ontario unless they have completed and submitted:

- c. • A letter to the Ministry of the Environment due November 30, 1990 indicating the type of foams imported and the companies which they had imported foams from in the past year.
- d. • Form C (see Appendix A) detailing "Annual Import Consumption" by March 31 of each year the regulation is in place. The form must include a reference number assigned to out-of-province manufacturers or distributors which have submitted Form A.

It is the responsibility of the importer to ensure that the out-of-province company they do business with has complied with the reduction and reporting requirements under Regulation 518/90.

If the Ministry of the Environment has not received a completed Form A from manufacturers outside Ontario, whose names have been submitted by Ontario-based importers, then the importers will receive a notice of non-compliance. Shipments accepted after a notice of non-compliance has been received may not be sold in Ontario.

Requirements for the Handling of Sprayed/Poured-in Place Polyurethane Foams and Foam Formulations for use as Insulation of Electrical Appliances, Hot Water Heaters, Refrigerated Vehicles or Refrigerated Mobile Equipment

- e. Anyone who manufactures or sells a polyurethane rigid insulation foam or foam formulation in Ontario for use as insulation for electrical appliances, hot water heaters, refrigerated vehicles or refrigerated mobile equipment, must complete and submit "Form A" and "Form B" (see Appendix A).

Any transfer of this foam destined for use in one of these applications must be accompanied by a letter of notification indicating that the foam may only be used for the purpose specified. **Anyone who receives a notification, and then uses the foam formulation for a purpose other than specified will have committed an offence and will be subject to prosecution.** Any subsequent sale or transfer of the foam formulation must also be accompanied by the appropriate letter of notification.

TABLE 3: ALLOWABLE CFC CONSUMPTION LEVELS FOR FOAMS AND FOAM FORMULATIONS

		1990	1991	1992	1993*	1994*
Flexible Polyurethane	RQ x 0.75/3**		0.65	0.50	0.25	0.00
Rigid Foam Insulation:						
Polyurethane	RQ x	n/a	0.75	0.50	0.25	0.00
Polyisocyanurate	RQ x	n/a	1.00	0.75	0.25	0.00
Extruded polystyrene	RQ x	n/a	0.50	0.50	0.00	0.00
Phenolic	RQ x	n/a	0.75	0.50	0.25	0.00
Sprayed/Poured-in Place Polyurethane Foams and Foam Formulations:						
Insulation of electrical appliances, hot water heaters, refrigerated vehicles or refrigerated mobile equipment	RQ x	n/a	1.00	1.00	1.00	0.00
Other applications	RQ x	n/a	0.85	0.70	0.50	0.00
Other Plastic Foams	RQ x	n/a	0.00	0.00	0.00	0.00

*** The Ontario Ministry of the Environment will track the availability of CFC substitutes and the ongoing toxicity studies. If the substitutes do not become commercially available, the appropriateness of the dates will be evaluated.**

**** the reduction factor for flexible polyurethane is divided by 3 to match approximately the 4-month period in which the regulation was in force during 1990.**

5.0

SPENT REFRIGERANTS

5.1

Affected Products

Stationary Refrigerant Waste (SRW)

A spent refrigerant collected during the installation, service or demolition of fixed commercial air conditioning units, refrigerators and freezers; domestic refrigeration and air conditioning systems.

Mobile Refrigerant Waste (MRW)

A spent refrigerant collected during the installation, service or demolition of an automobile, recreational vehicle, bus, and truck air conditioning system; refrigerated road vehicles and railcars.

5.2

Regulatory Controls

As noted in Section 2.4, under Regulation 309 service contractors and generators of refrigerant wastes were formerly required to register with the Ministry of the Environment and receive a generator registration number (one time only; see Appendix B). Transportation of these wastes had to be done only by a licensed carrier, and had to be shipped only to an approved waste disposal site. Every shipment of wastes to an approved site was required to meet manifest requirements.

Amendments to Regulation 309 under Part V of the *Environmental Protection Act*, effective September 15, 1990, have modified the requirements for generator registration, site approvals and the manifesting of refrigerant wastes. A new administrative structure is now in place that will facilitate the collection, handling and movement of refrigerant wastes for reclamation and recycling. The modified requirements will have a major impact on refrigeration and air conditioning service contractors and technicians, as well as manufacturers and distributors of refrigerant CFCs.

In fact, anyone who collects refrigerant waste during installation, disposal, service, testing, maintenance or demolition of refrigeration or air conditioning equipment, as well as any site or facility used in the collection of refrigerant waste, becomes part of a "refrigerant waste management system" that is subject to the requirements of Regulation 309 and the *Environmental Protection Act*.

Table 4 describes the key roles within a refrigerant waste management system.

TABLE 4: ROLES WITHIN A REFRIGERANT WASTE MANAGEMENT SYSTEM

	Stationary Refrigerant Waste (SRW)	Mobile Refrigerant Waste (MRW)
Person or company which removes and collects refrigerant waste from refrigeration and air conditioning equipment.	SRW Collector	MRW Collector
Person or company which receives refrigerant wastes from a refrigerant waste collector and sends the wastes to a recycler or an approved disposal site.	Wholesale Dealer	n/a (MRW may not go to a wholesale dealer in refrigerants)
Person or company which receives refrigerant wastes from a collector, a wholesale dealer, or an approved disposal site and recycles it for use in other refrigeration or air conditioning equipment.	SRW Recycler	MRW Recycler

5.3**The Management of Stationary Refrigerant Waste**

Note: These provisions do not make the recycling of stationary refrigerant wastes mandatory. They develop a collection network to make it easier to collect and move refrigerants for recycling. Once refrigerants are collected, it is mandatory to handle them according to the amendments to Regulation 309.

Restrictions in Handling and Movement**SRW Collector**

- May transport stationary refrigerant waste **from a service location** to their ordinary place of business for on-site recycling and reuse in air conditioning units, refrigerators or freezers; or
- May transport stationary refrigerant waste directly **from a service location** to a Wholesale Dealer in refrigerants or their ordinary place of business; and
- May transport stationary refrigerant waste from **ordinary place of business** to a Wholesale Dealer in refrigerants, an SRW Recycler, or an approved disposal site.

Wholesale Dealer	• May only receive stationary refrigerant waste from an SRW Collector directly from service location or an SRW Collector's ordinary place of business. • May only transport stationary refrigerant waste to an SRW Recycler or an approved disposal site.
SRW Recycler	• May only receive stationary refrigerant waste directly from the ordinary place of business of SRW Collectors, Wholesale Dealers or an approved disposal site (transfer station); and • May only recycle the stationary refrigerant waste for reuse in air conditioning units, refrigerators or freezers.

Regulatory Requirements (See Table 5)

Generator Registration	Submission of Generator Registration Form (see Appendix B) required for indicated sites one time only.
Manifests	Exemptions apply only if movements of stationary refrigerant wastes to and from a site comply with restrictions in handling and movement as described above.
Site Approvals	Only waste disposal sites receiving stationary refrigerant wastes and SRW Recyclers require a Certificate of Approval from the Ministry. Exemption from site approvals for the ordinary place of business of SRW Collectors and Wholesale Dealers conditional on the following: • Access to stationary refrigerant waste is controlled by gates, fencing, attendants or other security measures; • Containers in which stationary refrigerant waste is stored are clearly marked as to contents; • Stored stationary refrigerant waste is stored in a location and manner that prevents damage or deterioration to the containers and/or wastes; • There is available, at or near the site, fire-fighting equipment (such as fire extinguishers) and spill clean-up equipment (where appropriate) and containment equipment appropriate to the quantities and types of stationary refrigerant waste on or likely to be on the site; and • Written notice is given to the Ministry of the Environment within 90 days after the establishment of the site (see below).
Notification	Written notice to the Ministry must specify the location of the site and the estimated quantities and types of stationary refrigerant waste on or likely to be on the site. The notice should also indicate if on-site recycling will be taking place at the SRW Collector's ordinary place of business. (Notification for SRW Recycler and waste disposal site automatic with Certificate of Approval application.)

Service locations are exempt from site approvals.

Reporting Requirements

Record Keeping

A written record must be kept **each time** stationary refrigerant waste is removed, collected, received, recycled or transported. Written records may be disposed of after two years.

The written record shall show:

- The date, source, quantity, and type of stationary refrigerant waste collected, received, transported or recycled; and
- What was done with the stationary refrigerant waste.

Reporting

SRW Collectors which recycle stationary refrigerant wastes on-site and SRW Recyclers must submit to the Ministry of the Environment two six-month summaries using Form D (see Appendix B) before September 30 (covering January 1 to June 30) and before March 31 each year (covering July 1 to December 31 of the preceding year).

TABLE 5: REGULATORY REQUIREMENTS FOR THE MANAGEMENT OF STATIONARY REFRIGERANT WASTES

	Service Location	SRW Collector	Wholesale Dealer	SRW Recycler	Disposal Site
Generator Registration (Sec. 15, Ont. Reg. 309)	NO*	NO*	YES	N/A	N/A
Manifests (Sec. 16, Ont. Reg. 309.)	NO	NO	NO	NO	NO
Site Approvals (Sec. 27, EPA)	NO	NO**	NO**	YES	YES
Notification	NO	YES	YES	NO	NO
Record Keeping	NO	YES	YES	YES	N/A
Reporting	NO	NO***	NO	YES	N/A

* Generator Registration required **only** if SRW Collector sends stationary refrigerant wastes directly to an SRW Recycler or approved disposal site.

** Conditional on fulfilling requirements for security, labeling, storage, accessibility, safety equipment and notification.

*** Reporting required **only** if SRW Collector does on-site recycling at ordinary place of business.

Prohibition

The provisions relating to Mobile Refrigerant Waste will become mandatory on July 1, 1991. They will prohibit the discharge of Mobile Refrigerant Waste into the natural environment, or in such a manner that it will escape into the natural environment from mobile refrigeration/cooling equipment. Further, a person who removes Mobile Refrigerant Waste from such equipment is required to collect it and ensure that it is recycled.

Restrictions in Handling and Movement

MRW Collector

- Must recycle mobile refrigerant waste for use in air conditioning units, refrigerators or freezers through the use of on-site equipment; or
- May transport it directly to an MRW Recycler, or an approved disposal site for reclamation.

MRW Recycler

- May only receive mobile refrigerant waste from an MRW Collector or an approved waste disposal site and must recycle the waste for use in air conditioning units, refrigerators or freezers.

Special Guidelines for Automotive and Truck Scrap Dealers

No vehicle may be crushed or shredded unless the cooling system equipment has been evacuated and the refrigerant collected to prevent emission into the atmosphere. Once the CFCs have been removed, the equipment must be tagged indicating the date and name of the company doing the CFC recovery. A scrap dealer must ensure that all equipment is tagged prior to demolition.

*Regulatory Requirements (See Table 6)*Generator
Registration

Mobile refrigeration waste is exempt.

Manifests

Mobile refrigeration waste is exempt.

Site Approvals

Only waste disposal sites receiving mobile refrigerant wastes and MRW Recyclers require a Certificate of Approval from the Ministry.

Exemption from site approvals for the ordinary place of business of MRW Collectors conditional on the following:

- MRW Collector possesses and utilizes recovery/recycling equipment for mobile refrigerant waste; or
- MRW Collector possesses recovery equipment and a contract with a MRW Recycler.

Reporting Requirements

Record Keeping	A written record must be kept each time mobile refrigerant waste is removed, collected, received, recycled or transported. Written records may be disposed of after two years. The written record shall show: • The date, source, quantity, and type of mobile refrigerant waste collected, received, transported or recycled; and • What was done with the mobile refrigerant waste.
Reporting	MRW Collectors which recycle mobile refrigerant waste on-site and MRW Recyclers must submit to the Ministry of the Environment an annual 12-month summary using Form D (see Appendix B) before March 31 of each year, covering the 12-month period ending December 31 of the preceding year.

TABLE 6: REGULATORY REQUIREMENTS FOR THE MANAGEMENT OF MOBILE REFRIGERANT WASTES

	Service Location	MRW Collector	MRW Recycler	Disposal Site
Generator Registration (Sec. 15, Ont. Reg. 309)	NO	NO	NO	N/A
Manifests (Sec. 16, Ont. Reg. 309)	NO	NO	NO	NO
Site Approvals (Sec. 27, EPA)	NO	NO*	YES	YES
Record Keeping	NO	YES	YES	N/A
Reporting	NO	YES**	YES	N/A

* Conditional on having on-site recovery/recycling equipment or reclamation equipment and a contract with an MRW Recycler.

** Only if MRW Collector recycles mobile refrigerant waste on site of ordinary place of business.

FOR MORE INFORMATION

For more information on compliance with Ontario's regulated phase-out of ozone-depleting substances call or write:

"CFCs Coordinator"
Ontario Ministry of the Environment
Waste Management Branch
Suite 100
135 St. Clair Avenue West
Toronto, Ontario M4V 1P5

(416) 323-5200

APPENDICES

APPENDIX A - FORMS TO BE COMPLETED BY MANUFACTURERS AND IMPORTERS OF FOAMS AND FOAM FORMULATIONS

Form A - Manufacturers of Foams and Foam Formulations: Reference Quantities

Form A must be completed by both Ontario-based manufacturers and out-of-province manufacturers exporting foams and foam formulations into Ontario **for each plant or manufacturing facility**. The form must be submitted to the Ontario Ministry of the Environment by November 30, 1990.

In Part C of the form, manufacturers must indicate the "**Reference Year**" of operation for each type of foam or foam formulation. For flexible foams, the reference year is the first 12-month period of production between January 1, 1986 and September 15, 1990. For rigid insulation foam (boardstock and poured or sprayed-in place), the reference year is the first 12-month period of operation between January 1, 1989 and September 1, 1990.

Manufacturers of poured or sprayed-in place rigid foams must also identify themselves as either a "supply house" or a "self-formulator."

Supply House: A company which manufactures a formulation containing CFCs that when mixed together produces a rigid foam.

Self-Formulator: A company which purchases a formulation containing no CFCs, but introduces CFCs to produce a rigid insulating foam.

In Part D of the form, "**Reference Quantities**" (RQs) are calculated by multiplying the total quantity of each designated CFC used by weight (tonnes) for the appropriate 12-month period, by the appropriate "Ozone Depletion Potential" value resulting in an RQ for the total quantity of CFC used. (ODP values can be found in Table 1 of this guide).

Example: A company began operation on July 1, 1986, and by June 30, 1987 (12 months later) used 12 tonnes of CFC-11 and 14.5 tonnes of CFC-115 as blowing agents for the manufacturing of flexible polyurethane foam.

12.0 tonnes CFC-11 x 1.0	= 12.0 tonnes
14.5 tonnes CFC-115 x 0.6	= 8.7 tonnes
Reference Quantity	= 20.7 tonnes

Note the difference in 12-month periods used in RQ calculations for manufacturers of flexible foams versus manufacturers of rigid insulation foams.

Form B - Manufacturers of Foams and Foam Formulations: Annual Consumption of CFCs

Form B must be completed by both Ontario-based manufacturers and out-of-province manufacturers who sell foams and foam formulations into Ontario **for each plant or manufacturing facility**. The form must be submitted to the Ontario Ministry of the Environment by March 31 of each year, beginning in 1991.

This form will be used by the Ministry to verify that CFC-reduction targets are being met by the manufacturer.

The "**Control Period**" in Part C refers to the calendar year of production (January 1 to December 31) for which the regulation is in place.

Calculations of "**Actual Quantities Used During Control Period**" for each type of foam or foam formulation is very similar to the calculation for "**Reference Quantities**" used in Form A. ODP (Ozone Depletion Potential) values are provided in Table 1 of this Compliance Guide.

Form C - Importers of Foams and Foam Formulations: Annual CFC Consumption Quantities

In Part A of the form, "**Import Locations in Ontario**" includes all facilities and sites owned by the company which receive foams and foam formulations from out-of-province suppliers.

Examples of "**Foam Product Applications**" in Part C include such applications as the import of flexible polyurethane foam for use in furniture manufacturing, phenolic insulation foam for roofing, etc.

Out-of-province manufacturers and distributors of foams and foam formulations which have reported reference quantities (RQs) using Form A, will receive a "**Reference Number**" to be used by the importer in Part D. The importer must obtain this reference number from each out-of-province supplier.

FORM A - MANUFACTURERS OF FOAMS AND FOAM FORMULATIONS REFERENCE QUANTITIES

All manufacturers of CFC-blown flexible foams and rigid insulation foams or foam formulations (exempt and non-exempt applications) within or outside of Ontario must complete and submit this form to the Ontario Ministry of the Environment by November 30, 1990.

A. COMPANY DETAILS

Company Name

Corporate Address

City

Province

Postal Code

Contact Person

Title

Telephone

Fax

B. PLANT LOCATIONS

List all plant or manufacturing facilities producing foams or foam formulations. Check box indicating the plant this form is being submitted for. CHECK ONLY ONE.

☐
☐
☐

☐ Attachment provided. Title it "ANNEX 1"

C. TYPE OF FOAM MANUFACTURED AND REFERENCE YEARS

FLEXIBLE FOAM USING CFCs

Indicate dates of FIRST 12-MONTH period of production between January 1, 1986 and September 15, 1990

☐

From

to

RIGID INSULATION FOAMS (BOARDSTOCK) USING CFCs

Indicate dates of FIRST 12-MONTH period of production between January 1, 1989 and September 15, 1990

☐

POLYSTYRENE

From

to

☐

POLYURETHANE

From

to

☐

POLYISOCYANURATE

From

to

☐

PHENOLIC

From

to

RIGID INSULATION FOAMS (POURED OR SPRAYED-IN PLACE POLYURETHANE) USING CFCs

Indicate dates of FIRST 12-MONTH period of production between January 1, 1989 and September 15, 1990

☐

APPLIANCE AND VEHICLE APPLICATIONS (Section 4.4 of the Compliance Guide)

From

to

Are you a () Supply House or () Self-Formulator?

☐

OTHER APPLICATIONS

From

to

Are you a () Supply House or () Self-Formulator?

See Appendix A of the Compliance Guide for definition of "Supply House" and "Self-Formulator".

...continued

D. REFERENCE QUANTITIES (RQS)

Calculate quantities of CFCs used to manufacture foams or foam formulations within Reference Year (Part C). Multiply actual quantity of CFC used by the "Ozone Depletion Potential" (ODP) value found in Table 1 of the Compliance Guide.

Type of Foam	Types of CFCs Used	Tonnes of CFC Used	x	ODP Value	=	Total Quantity
(EXAMPLES) Flexible Polyurethane	CFC-11	12.0t		1.0		12.0t
	CFC-115	14.5t		0.6		8.7t
				RQ		20.7t
Rigid Polyurethane Formulation	CFC-12	10.5t		1.0		10.5t
				RQ		10.5t
				RQ		
				RQ		
				RQ		
				RQ		

☐ Attachment provided. Title it "ANNEX 2"

I hereby certify that the information as provided by my company in this form is correct.

Signature of contact person

Date

It is an offence under the *Environmental Protection Act* to provide false information.

Companies not manufacturing flexible foams, rigid insulation foams or CFC-blended formulations before September 15, 1990 are prohibited from manufacturing these foams using CFCs as a blowing agent.

RETURN THIS COMPLETED AND SIGNED FORM TO:

Ontario Ministry of the Environment
Waste Management Branch
Suite 100
135 St. Clair Avenue West
Toronto, Ontario M4V 1P5
Attention: CFC Reports

FOR MINISTRY USE

Reference Quantities Approved

Date

Signature

Ref. No.

FORM B - MANUFACTURERS OF FOAMS AND FOAM FORMULATIONS ANNUAL CONSUMPTION OF CFCs

All manufacturers of CFC-blown flexible foams and rigid insulation foams or foam formulations (exempt and non-exempt applications) within or outside of Ontario must complete and submit this form FOR EACH PLANT OR MANUFACTURING FACILITY to the Ontario Ministry of the Environment by March 31 of each year, beginning in 1991.

A. COMPANY DETAILS

Company Name

Corporate Address

City

Province

Postal Code

Contact Person

Title

Telephone

Fax

B. PLANT LOCATIONS

List all plant or manufacturing facilities producing foams or foam formulations. Check box indicating the plant this form is being submitted for. CHECK ONLY ONE.

☐
☐
☐

☐ Attachment provided. Title it "ANNEX 1"

C. CONTROL PERIOD (Calendar Year of Production)

☐ 1990

☐ 1991

☐ 1992

☐ 1993

☐ 1994

D. ACTUAL QUANTITIES USED DURING CONTROL PERIOD

* RQ refers to "Reference Quantity" as reported in Form A and approved by the Ministry of the Environment.

** See "Compliance Guide" Section 4.5 for definitions of "Exempt" applications and Appendix A for definitions of "Supply House" and "Self-Formulator".

☐ FLEXIBLE FOAM USING CFCs

RQ*

Required Reduction

%

CFCs CONSUMED DURING CONTROL PERIOD

Type of
CFCs Used

Tonnes of
CFCs Used

x

ODP
Value

=

Quantity
Consumed

TOTAL

...continued

RIGID INSULATION FOAMS (BROADSTOCK) USING CFCs☐ **POLYSTYRENE**

RQ*		Required Reduction	%
CFCS CONSUMED DURING CONTROL PERIOD			
Type of CFCs Used	Tonnes of CFCs Used	x	ODP Value = Quantity Consumed
		TOTAL	

☐ **POLYURETHANE**

RQ*		Required Reduction	%
CFCS CONSUMED DURING CONTROL PERIOD			
Type of CFCs Used	Tonnes of CFCs Used	x	ODP Value = Quantity Consumed
		TOTAL	

☐ **POLYISOCYANURATE**

RQ*		Required Reduction	%
CFCS CONSUMED DURING CONTROL PERIOD			
Type of CFCs Used	Tonnes of CFCs Used	x	ODP Value = Quantity Consumed
		TOTAL	

☐ **PHENOLIC**

RQ*		Required Reduction	%
CFCS CONSUMED DURING CONTROL PERIOD			
Type of CFCs Used	Tonnes of CFCs Used	x	ODP Value = Quantity Consumed
		TOTAL	

RIGID INSULATION FOAMS (POURED OR SPRAYED-IN PLACE POLYURETHANE) USING CFCs

☐ APPLIANCE AND VEHICLE APPLICATIONS		() Supply House	() Self-Formulator
RQ*		Required Reduction	%
CFCS CONSUMED DURING CONTROL PERIOD			Ratio of Quantities of CFCs Used to Quantities of Foam Produced
Type of CFCs Used	Tonnes of CFCs Used	Tonnes of Foam Produced	
☐ OTHER APPLICATIONS		() Supply House	() Self-Formulator
RQ*		Required Reduction	%
CFCS CONSUMED DURING CONTROL PERIOD			
Type of CFCs Used	Tonnes of CFCs Used	x	ODP Value = Quantity Consumed
		TOTAL	

I hereby certify that the information as provided by my company in this form is correct.

Signature of contact person

Date

It is an offence under the *Environmental Protection Act* to provide false information.

Companies not manufacturing flexible foams, rigid insulation foams or CFC-blended formulations before September 15, 1990 are prohibited from manufacturing these foams using CFCs as a blowing agent.

RETURN THIS COMPLETED AND SIGNED FORM TO:

Ontario Ministry of the Environment
Waste Management Branch
Suite 100
135 St. Clair Avenue West
Toronto, Ontario M4V 1P5
Attention: CFC Reports

FOR MINISTRY USE

Annual Reductions Achieved

Date

Signature

FORM C - IMPORTERS OF FOAMS AND FOAM FORMULATIONS ANNUAL CFC CONSUMPTION QUANTITIES

All importers of CFC-blown flexible foams and rigid insulation foams or foam formulations from outside of Ontario must complete and submit this form to the Ontario Ministry of the Environment by March 31 of each year beginning in 1991.

All companies/persons importing quantities of flexible foams and rigid insulation foams (for both exempt and non-exempt applications) are required to submit a letter of notification to the Ministry of the Environment by November 30, 1990. The letter must identify the most recent data on types of foam imported and the names of companies outside of Ontario imported from. The import of foams is banned from out-of-province companies which fail to meet the scheduled phase-out of CFCs or which fail to report reference quantities and annual CFC consumption (Forms A and B) to the Ministry by Nov. 30, 1990.

A. COMPANY DETAILS

Company Name

Corporate Address

City

Province

Postal Code

Contact Person

Title

Telephone

Fax

Import Locations in Ontario

☐ Attachment provided. Title it "ANNEX 1"

B. TYPE OF FOAM IMPORTED

☐ FLEXIBLE FOAM USING CFCs

RIGID INSULATION FOAMS (BROADSTOCK) USING CFCs

☐ POLYSTYRENE

☐ POLYURETHANE

☐ POLYISOCYANURATE

☐ PHENOLIC

RIGID INSULATION FOAMS (POURED OR SPRAYED-IN PLACE) USING CFCs

☐ EXEMPT APPLICATIONS (Section 4.5 of the Compliance Guide)

☐ NON-EXEMPT APPLICATIONS

See Appendix A of the Compliance Guide for definition of "supply house" and "self-formulator".

...continued

C. FOAM PRODUCT APPLICATIONS

Provide a brief description of the types of products manufactured by the company using imported foams or foam formulations (See Appendix A in Compliance Guide)

--

D. OUT-OF-PROVINCE SUPPLIERS

Out-of-province manufacturers and distributors of foams and foam formulations which have reported reference quantities (RQs) using Form A, will receive a reference number to be used by the importer. THE IMPORTER MUST OBTAIN THIS REFERENCE NUMBER FROM THE OUT-OF-PROVINCE SUPPLIER AND INDICATE BELOW.

Company Name	
Telephone	Ref. No.
Foam Type	
Company Name	
Telephone	Ref. No.
Foam Type	
Company Name	
Telephone	Ref. No.
Foam Type	
Company Name	
Telephone	Ref. No.
Foam Type	
☐ Attachment provided. Title it "ANNEX 2"	

I hereby certify that the information as provided by my company in this form is correct.

Signature of contact person

Date

It is an offence under the *Environmental Protection Act* to provide false information.

RETURN THIS COMPLETED AND SIGNED FORM TO:

Ontario Ministry of the Environment
Waste Management Branch
Suite 100
135 St. Clair Avenue West
Toronto, Ontario M4V 1P5
Attention: CFC Reports

FOR MINISTRY USE

Date

Signature

APPENDIX B - FORMS TO BE COMPLETED BY COLLECTORS AND RECYCLERS OF REFRIGERANT WASTE

Form D - Collectors and Recyclers of CFC Refrigerant Waste: Annual and Semi-Annual Quantities

This form is to be completed by any person or company recycling refrigerant wastes, whether they are a "Collector" or a "Recycler" under Ontario Regulation 520/90. Note the difference in reporting periods for stationary and mobile refrigerant wastes.

Generator Registration

A Generator Registration kit, which includes proper instructions and forms may be obtained from the Ministry of the Environment by calling: (416) 323-5200.

When completing the form, please note the following:

- **Part 1, item 10**, the "SIC" code will vary depending on whether you are a collector or a wholesaler. Examples of these are as follows:

Wholesaler in heating, air conditioning:	5622
Service in commercial refrigeration:	4253
Service in Air conditioning:	4243

- **Part 2** must be completed for each type of refrigeration.
- **Part 2, item 4**, the "Waste Class" 241H applies to wastes containing refrigerants listed in Schedule 1 of Regulation 309. The "Hazardous Waste Number" is not required as the movements have been exempt from manifest.
- **Part 3** should identify the recycler or disposal facility which is receiving the wastes for recycling, and the name of the company transporting those wastes. If the receiver is picking up the wastes and transporting them, then the receiver and the carrier will be the same.

An example of a completed generator registration form has been included for your information.



FORM D - COLLECTORS AND RECYCLERS OF CFC REFRIGERANT WASTE ANNUAL AND SEMI-ANNUAL QUANTITIES

To be completed by any person or company recycling refrigerant waste, whether or not deemed to be a "Collector" or a "Recycler" under Ont. Reg. 520/90. (See Table 4 in the Compliance Guide).

Quantities of "Stationary Refrigerant Waste" recycled must be reported to the Ontario Ministry of the Environment semi-annually before September 30 and March 31 each year for the appropriate reporting period. Quantities of "Mobile Refrigerant Waste" recycled must be reported annually before March 31 each year for the appropriate reporting period. SEE PART B "REPORTING PERIOD".

A. COMPANY DETAILS

Company Name

Corporate Address

City

Province

Postal Code

Contact Person

Title

Telephone

Fax

☐ **STATIONARY REFRIGERANT WASTE (SRW)**

☐ Company is an SRW Collector which recycles stationary refrigerant waste on-site of ordinary place of business

☐ Company is an SRW Recycler

☐ **MOBILE REFRIGERANT WASTE (MRW)**

☐ Company is an MRW Collector which recycles mobile refrigerant waste on-site of ordinary place of business

☐ Company is an MRW Recycler

(Check more than one box if appropriate)

B. REPORTING PERIOD

STATIONARY REFRIGERANT WASTE: SEMI-ANNUAL

☐ January 1 to June 30, 19 ____

☐ July 1 to December 31, 19 ____

MOBILE REFRIGERANT WASTE: ANNUAL

☐ January 1 to December 31, 19 ____

C. TYPES AND QUANTITIES OF CFC REFRIGERANT WASTES RECYCLED

(For appropriate reporting period)

TYPE	GAS Quantity*	LIQUID Quantity*
☐ Attachment provided. Title it "Annex 1".	* Indicate unit of measure. Please be consistent!	

...continued

D. WHAT WAS DONE WITH THE RECYCLED REFRIGERANTS?

(Specify technology used)

I hereby certify that the information as provided by my company in this form is correct.

Signature of contact person_____
Date

It is an offence under the *Environmental Protection Act* to provide false information.

RETURN THIS COMPLETED AND SIGNED FORM TO:

Ontario Ministry of the Environment
Waste Management Branch
Suite 100
135 St. Clair Avenue West
Toronto, Ontario M4V 1P5
Attention: CFC Reports

FOR MINISTRY USE_____
Date_____
Signature



Ontario

Ministry
of the
Environment

Ministère
de
l'Environnement

Generator Registration Report

"Regulation 309, R.R.O. 1980, Form 2"

Rapport d'inscription du producteur

"Règlement 309, R.R.O. de 1980, formule 2"

NOTE: Regulation 309 requires generators of hazardous or liquid industrial wastes to submit a Generator Registration Report using this form respecting each waste generation facility and each hazardous or liquid industrial waste.

REMARQUE: Le règlement 309 exige que les producteurs de déchets industriels liquides ou dangereux présentent un Rapport d'inscription du producteur en se servant de la présente formule pour chaque lieu de production de déchets et chaque déchet industriel liquide ou dangereux.

Part I - Generator Identification / Partie I - Identification du producteur

This report is / Le présent rapport constitue:

Generator Registration Number
N° d'inscription du producteur

1. ☒ an initial generator registration report /
un premier rapport d'inscription du producteur

or / ou

2. ☐ a revision - enter Ontario Generator Registration No.
une révision - veuillez inscrire le numéro d'inscription du producteur de l'Ontario

3. For generators located outside of Ontario, enter Registration/Notification number assigned by your local environmental authority. / Si vous êtes un producteur de l'extérieur de l'Ontario, veuillez inscrire le numéro d'inscription/d'identification attribué par les autorités locales en matière d'environnement.

Name of Generator (Enter the corporate name or, if a partnership or proprietorship, the name of the principal(s). If the generator intends to carry on business under a separate name or style, this should also be entered.) / Nom du producteur (Veuillez inscrire la dénomination sociale ou, s'il s'agit d'une société en nom collectif ou d'une société à propriétaire unique, le nom du (des) principal (principaux) propriétaire(s). Si le producteur envisage d'exploiter une entreprise sous une dénomination ou un nom distinct, veuillez également le noter.)

4. Name / Nom

JOHN'S REFRIGERANT DISTRIBUTING CO

5. Address / Adresse

412 JOHN STREET

6. Municipality / Municipalité

TORONTO

Province/State
Province/État

ONT

Postal Code / Code postal

L2Z3Y2

7. Site location / Lieu des installations

412 JOHN STREET

8. Municipality / Municipalité

TORONTO

Province/State
Province/État

ONT

Postal Code / Code postal

L2Z3Y2

9. Name of contact / Nom de la personne à contacter

RONALD ROJOHN

Tel. No. / N° de tél.

416 123 4567

10. Standard Industrial Classification Codes (SIC) for Site noted in Section 7. / Codes de la classification des activités économiques pour les installations décrites au n° 7

5622

11. Total number of wastes to be registered with this report /
Nombre total de déchets à inscrire au moyen de ce rapport

2

12. Name of Company Official / Nom du représentant autorisé de la compagnie

RONALD ROJOHN

13. Position / Poste

President

14. Signature / Signature

15. Date / Date

Sept. 14, 1990

PENALTY

PÉNALTÉ

Contraventions may be punished by fines of up to \$2,000 (higher if environmental damage may result).
(Environmental Protection Act, sections 47 and 147)

Toute infraction peut être sanctionnée par une amende maximale de 2 000 \$
(ou plus s'il peut en résulter une détérioration de l'environnement)
(Articles 47 et 147 de la Loi sur la protection de l'environnement)

16. Ministry Use Only /
Réserve au ministère

County Code / Code de comté

Regional/District Code / Code de région/district

Municipal Code / Code de municipalité

Inter City Tie Line / Ligne privée interurbaine

Part 2 - Waste Identification / Partie 2 - Identification des déchets

1. Description of Waste / Description des déchets

Refrigerant wastes - CFC-11 (trichlorofluoromethane)

2. Description of generating process / Description du procédé de production

Stationary refrigerant wastes received from collectors servicing commercial air conditioning equipment.

3. Waste quantity generated or accumulated / Quantité des déchets produits ou accumulés

Continuous process / Procédé continu

175

kg/mo. / kg/mois

or / ou

Batch process / par lots

batches/mo.
lots/mois

kg/batch / kg/lot

4. Primary characteristic / Caractéristique principale

Schedule 1 - Hazardous Industrial Waste

Analytical data (if applicable). If the data has been estimated, attach separate sheet outlining the basis for the estimate. / Données analytiques (le cas échéant). Si les données sont estimatives, veuillez annexer une feuille à part pour décrire sur quoi reposent les estimations.

Name of Laboratory (if applicable). / Laboratoire (le cas échéant)

Waste Class

Catégorie des déchets

241H

Hazardous Waste Number

Numéro des déchets dangereux

Specific Gravity

Gravité spécifique

Physical State

(Solid - S, Liquid - L, Gas - G)

État physique

(solide - S, liquide - L, gaz - G)

L

For Ministry Use Only / Réservé au ministère

5. Secondary Characteristic / Caractéristique secondaire

Analytical data (if applicable) / Données analytiques (le cas échéant)

Part 3 - Waste Management / Partie 3 - Gestion des déchets

1. Principal Intended Receiver / Réceptionnaire principal prévu

Company name and address / Nom et adresse de la compagnie

NAME OF COMPANY TO RECYCLE WASTES

Receiver No. / N° du réceptionnaire

Municipality
Municipalité

Province/State
Province/État

Postal Code
Code postal

2. Principal Intended Carrier / Transporteur principal prévu

Company name and address / Nom et adresse de la compagnie

NAME OF COMPANY CARRYING WASTES
TO RECYCLE (may be recycler or other)

MOE Carrier No.
N° du M. de l'E. du transporteur

A

Municipality
Municipalité

Province/State
Province/État

Postal Code
Code postal

Part 2 - Waste Identification / Partie 2 - Identification des déchets

1. Description of Waste / Description des déchets

Refrigerant wastes - CFC-113 (1,1,2-trichloro-
1,2,2-trifluoroethane)

2. Description of generating process / Description du procédé de production

Stationary refrigerant wastes received from various
collectors servicing refrigeration equipment

3. Waste quantity generated or accumulated / Quantité des déchets produits ou accumulés

Continuous process / Procédé continu

120

kg/mo. / kg/mois

or / ou

Batch process / par lots

batches/mo.
lots/mois

kg/batch / kg/lot

4. Primary characteristic / Caractéristique principale

Schedule 1 - Hazardous Industrial Waste

Analytical data (if applicable). If the data has been estimated, attach separate sheet outlining the basis for the estimate. / Données analytiques (le cas échéant). Si les données sont estimatives, veuillez annexer une feuille à part pour décrire sur quoi reposent les estimations.

Name of Laboratory (if applicable) / Laboratoire (le cas échéant)

Waste Class
Catégorie des déchets

2414

Hazardous Waste Number
Numéro des déchets dangereux

Specific Gravity
Gravité spécifique

Physical State
(Solid - S, Liquid - L, Gas - G)
État physique
(solide - S, liquide - L, gaz - G)

L

For Ministry Use Only / Réservé au ministère

5. Secondary Characteristic / Caractéristique secondaire

Analytical data (if applicable) / Données analytiques (le cas échéant)

Part 3 - Waste Management / Partie 3 - Gestion des déchets

1. Principal Intended Receiver / Réceptionnaire principal prévu

Company name and address / Nom et adresse de la compagnie

Receiver No. / N° du réceptionnaire

Municipality
Municipalité

Province/State
Province/État

Postal Code
Code postal

2. Principal Intended Carrier / Transporteur principal prévu

Company name and address / Nom et adresse de la compagnie

MOE Carrier No.
N° du M. de l'E. du transporteur

A

Municipality
Municipalité

Province/State
Province/État

Postal Code
Code postal